

**REMARKS/ARGUMENTS**

**Status of the Claims**

Claims 1-5, 8-16, 18, 19, 27, 30, 32-34, 36, 37, 39-41, 43-46, 48, 49, 54-67, 69-73, 76, 79, 80, 83, 84, 87, 89, 90 and 92 are pending. Claims 1-3, 11, 18, 36, 43, 44, 61, 62, and 89 are to be amended. Claims 4-10, 12 -17, 19-35, 37-40, 42, 45-53, 63-88, and 90-94 are to be canceled without prejudice. Claims 95-101 are newly presented. After entry of these amendments, Claims 1-3, 11, 18, 36, 41, 43, 44, 54-62, 89 and 95-101 will be pending.

The rejection of claims 36, 37, 39, 40, 89, 90, and 92 under 35 U.S.C. 112, 2nd paragraph is maintained. Applicants thank the Examiner for the favorable reconsideration which obviated the corresponding rejection of claims 9-11 and 66-68.

The rejection of claims 1 and 61 as allegedly anticipated by Sato et al. under 35 U.S.C. § 102(b) is maintained.

Claims 1-5, 8, 12-16, 18, 19, 27, 30, 32-34, 41, 43-46, 48, 49, 54-65, 69-73, 76, 79, 80, 83, 84, and 87 stand newly rejected for an alleged double patenting of the nonobviousness type over U.S. Patent No. 5,880,151.

Claims 1-3, 9-11, 36, 37, 61, 62, 66 and 67 stand newly rejected for an alleged double patenting of the nonobviousness type over U.S. Patent No. 6,121,304.

Claims 1, 30, 43, 44, and 54-61 stand newly rejected for an alleged double patenting of the nonobviousness type over U.S. Patent No. 6,316,484.

Claims 1-4, 12, 15, 16, 61-63, 69, 72 and 73 stand newly rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by Mohrs et al. (U.S. Patent No. 5,093,340).

Claims 1, 61, and 62 stand newly rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by any one of Lardy et al. (U.S. Patent No. 5,387,709); Bigg et al. (U.S. Patent No. 5,385,931); and Sato et al. (EP 469,901).

Claims 61 and 62 stand newly rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by both Wilkes et al. (U.S. Patent No. 4,900,867) and Pews et al. (U.S. Patent No. 5,591,503).

Claims 43-45 and 56-59 stand newly rejected as being allegedly unpatentable pursuant to 35 U.S.C. §103(a) over Mohrs et al. ('340) in view of Witte et al. (U.S. Patent No. 4,443,477).

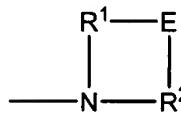
Applicants respectfully address each of the above rejections in turn below.

Support for the Amendments to the Claims

Base compound claim 61 was amended to set forth that R<sup>2</sup> is "optionally substituted heteroaryl" in place of "optionally substituted aryl or heteroaryl." The remainder of the claim was amended accordingly to cancel reference to subject matter wherein R<sup>2</sup> was aryl. Support for this amendment is set forth *inter alia* in the previous version of the claim.

Base composition claim 1 and base methods claim 43 were amended to set forth the compound subject matter as set forth for currently amended claim 61. Their dependent claims were amended accordingly to cancel reference to subject matter wherein R<sup>2</sup> was aryl.

Base claims 1, 43, and 61 were each further amended to clarify the subject matter by additionally reciting that the ring is formed of -NR<sup>1</sup>R<sup>2</sup> and setting forth the heterocycle as



Support for this subject is found *inter alia* in the previous version of the claim.

Claim 36 has been amended for purposes of clarity and now recites the ring formula as set forth in the base claim. Support for this subject matter is found *inter alia* in the original claim and the base claim.

New composition claim 95 and new methods claim 96 depend from claims 1 and 43 respectively and set forth compound subject matter as set forth in amended compound claims 62. Support is found in the previous version of the claims and as set forth for claim 62.

New methods claim 97 depends from claim 43 and sets forth the compound subject matter of claim 36. Support is found in the base claim and as set forth for claim 36 above.

Composition claim 18 and new method claim 98 and new compound claim 99 recite compounds in the listing beginning on page 16 in which R<sup>2</sup> is heteroaryl.

New compound claim 100 depends from claim 62 and new methods claim 101 depends from claim 44. These new claims set forth compound subject matter set forth in original claim 41.

In view of the above, Applicants believe the amendments to the claims add no new matter and respectfully request their entry.

Response to the rejection of claims 36, 37, 39, 40, 89, 90, and 92 under 35U.S.C. 112, 2nd paragraph.

Without acquiescing to the position of the Examiner, claims 37-40, 90 and 92 have been canceled and claims 36 and 89 have been amended to expedite prosecution of the application. The amended claims do set forth "E." In view of the above, Applicants request that the above rejection be reconsidered and withdrawn.

Response to the Rejection of Claims 1-5, 8, 12-16, 18, 19, 27, 30, 32-34, 41, 43-46, 48, 49, 54-65, 69-73, 76, 79, 80, 83, 84, and 87 for an alleged double patenting of the nonobviousness type over U.S. Patent No. 5,880,151.

Applicants respectfully request that the above rejection under the judicially-created doctrine of obviousness-type double patenting be held in abeyance until subject matter is otherwise found allowable. Should this rejection still be set forth at that time, Applicants intend to file a suitable terminal disclaimer.

Response to the Rejection of Claims 1-3, 9-11, 36, 37, 61, 62, 66 and 67 for an alleged double patenting of the nonobviousness type over U.S. Patent No. 6,121,304.

Applicants respectfully request that the above rejection under the judicially-created doctrine of obviousness-type double patenting be held in abeyance until subject matter is otherwise found allowable. Should this rejection still be set forth at that time, Applicants intend to file a suitable terminal disclaimer.

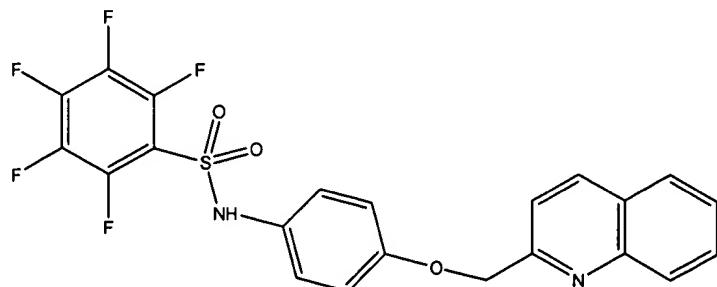
Response to the Rejection of Claims 1, 30, 43, 44, and 54-61 for an alleged double patenting of the nonobviousness type over U.S. Patent No. 6,316,484.

Applicants respectfully request that the above rejection under the judicially-created doctrine of obviousness-type double patenting be held in abeyance until subject matter is otherwise found allowable. Should this rejection still be set forth at that time, Applicants intend to file a suitable terminal disclaimer.

Response to the Rejection of Claims 1-4, 12, 15, 16, 61-63, 69, 72 and 73 for alleged anticipation by Mohrs et al. (U.S. Patent No. 5,093,340).

Pursuant to MPEP §2131, to anticipate a claim, the reference must teach every element of the claim.

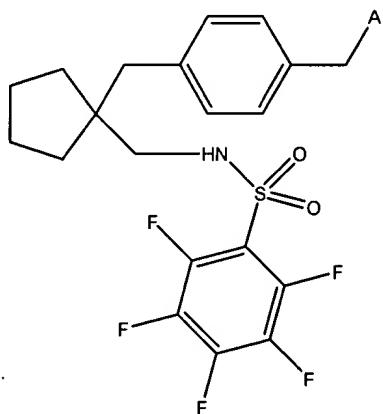
Without acquiescing to the position of the Examiner, the base claims have been amended to set forth that R<sup>2</sup> is optionally substituted heteroaryl. The cited pentafluorophenyl compound of Example 77 from the '340 patent is a substituted phenyl (not substituted heteroaryl), which is substituted with a heteroarylmethoxy group. The cited compound has the formula:



In view of the above, the Applicants respectfully request that the above rejection be reconsidered and withdrawn.

Response to the Rejection of claims 1, 61, and 62 for alleged anticipation by Lardy et al. (U.S. Patent No. 5,387,709)

The Examiner cites Example 100a of Lardy et al. as disclosing a compound of the formula:



in which A is CH<sub>2</sub>O-THP and THP is 3,4,5,6-tetrahydro-2H-pyran-2-yl.

Applicants do not believe the above compound anticipated the previous version of the claims. Nevertheless, without acquiescing to the position of the Examiner, claims 1 and 61 have been amended to set forth that R<sup>2</sup> is optionally substituted heteroaryl. The cited compound is not such a compound. As the reference does not teach or suggest every element of the base claims, Applicants respectfully request the above rejection be reconsidered and withdrawn.

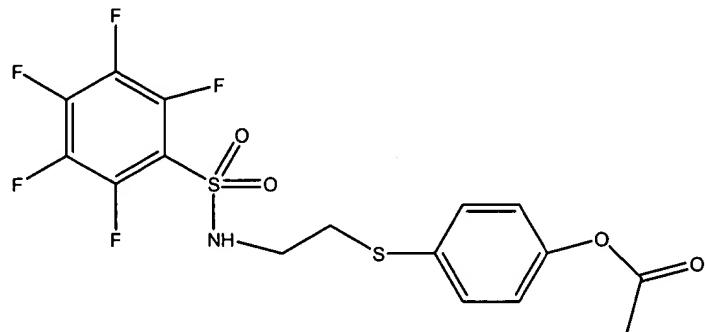
Response to the Rejection of claims 1, 61, and 62 for alleged anticipation by Bigg et al. (U.S. Patent No. 5,385,931)

The Action alleges compounds 24a and 24 of the '931 patent anticipate claims 1, 6, and 62. Compounds 24a and 24 set forth substituted aryl-alkyl pentafluorosulphonamides. Applicants do not believe the above compound anticipated the previous version of the claims.

Nevertheless, without acquiescing to the position of the Examiner, the base claims have been amended to set forth that  $R^2$  is optionally substituted heteroaryl. The cited compounds do not have such a structural feature. As the reference does not teach or suggest every element of the base claims, Applicants respectfully request the above rejection be reconsidered and withdrawn.

Response to the Rejection of claims 1, 61, and 62 for alleged anticipation by Sato et al. (EP 469,901)

The Action cites the '901 patent reference as disclosing Compound 81 (page 19) 4-[2-(2,3,4,5,6-pentafluorophenylsulfonylamino)ethylthio]phenoxyacetic acid:



Without acquiescing to the position of the Examiner, the base claims have been amended to set forth that  $R^2$  is optionally substituted heteroaryl. The cited compound lacks such a structural feature. As the reference does not teach or suggest every element of the base claims, Applicants respectfully request the above rejection be reconsidered and withdrawn.

Response to the Rejection of claims 61 and 62 for alleged anticipation by Wilkes et al (U.S. Patent No. 4,900,867)

The '867 patent discloses methods of making N-fluorosulfonamides by fluorinating sulfonamides. The reference exemplifies their synthesis using N-neopentyl pentafluorosulfonamide and n-propyl pentafluorosulfonamide as intermediates in the production of the corresponding N-fluoro sulfonamides.

Without acquiescing to the position of the Examiner, claim 61 has been amended to set forth that  $R^2$  is optionally substituted heteroaryl. The cited compound is not such a

compound. As the reference does not appear to teach every element of the base claim, Applicants respectfully request the above rejection be reconsidered and withdrawn.

Response to the Rejection of claims 61 and 62 for alleged anticipation by Pews et al. (U.S. Patent No. 5,591,503).

The Action points to the '513 patent as disclosing N,N'-di-octylpentaflourobenzenesulfonamide and acknowledges that the reference does not disclose a pharmaceutical use of such compounds.

Without acquiescing to the position of the Examiner, claims 1 and 61 have been amended to set forth that R<sup>2</sup> is optionally substituted heteroaryl. The cited compound lacks such a structural feature. As the reference does not teach or suggest every element of the base claim, Applicants respectfully request the above rejection be reconsidered and withdrawn.

Response to the Rejection of Claims 43-45 and 56-59 pursuant to 35 U.S.C. §103(a) over Mohrs et al ('340) in view of Witte et al. (U.S. Patent No. 4,443,477).

Pursuant to MPEP § 2143.03 all claim limitations must be taught or suggested to establish a *prima facie* case of obviousness for a claimed invention. As set forth above, the '340 patent does disclose compounds of the claims as amended. Similarly, the '477 patent does not disclose compounds of the claims as amended. Thus, the combination of the two references can not cure the deficiency. In view thereof, Applicants respectfully request that the above rejection be reconsidered and withdrawn.

Appl. No. 09/972,743  
Amdt. dated May 27, 2004  
Reply to Office Action of November 28, 2003

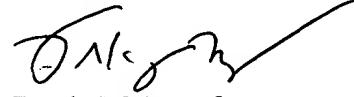
PATENT

**CONCLUSION**

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 925-472-5000.

Respectfully submitted,



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